Pinus ponderosa / Arctostaphylos uva-ursi Woodland

COMMON NAME	Ponderosa Pine / Bearberry Woodland
SYNONYM	Ponderosa Pine / Kinikinnick Woodland
PHYSIOGNOMIC CLASS	Woodland (II)
PHYSIOGNOMIC SUBCLASS	Evergreen woodland (II.A)
PHYSIOGNOMIC GROUP	Temperate or subpolar needle-leaved evergreen woodland (II.A.4)
PHYSIOGNOMIC SUBGROUP	Natural/semi-natural (II.A.4.N)
FORMATION	Rounded-crowned temperate or subpolar needle-leaved evergreen woodland (II.A.4.N.a.)
ALLIANCE	*Pinus ponderosa* Woodland Alliance

CLASSIFICATION CONFIDENCE LEVEL 1

USFWS WETLAND SYSTEM Upland

RANGE
Globally
This community is found in southeastern Montana, eastern Wyoming, and western South Dakota.

Jewel Cave National Monument
This community occurs in the northern part of the Monument and in the area to the north.

ENVIRONMENTAL DESCRIPTION
Globally
This community is found on flat to gently sloping terrain (3-21%) in the Black Hills (Hoffman and Alexander 1987). It has been found from 1540-3000 m (4250-9100 ft). The slopes are more likely to be facing northward than southward. Soils are sandy loams and clay loams.

Jewel Cave National Monument
This community occurs typically on gentle to moderate slopes (5 to 15 degrees), and occasionally on steeper slopes. It was found on all aspects but south.

MOST ABUNDANT SPECIES
Globally

Stratum	Species
Tree canopy	*Pinus ponderosa*
Short shrub	*Arctostaphylos uva-ursi, Juniperus communis, Symphoricarpos albus*
Herbaceous	*Oryzopsis asperifolia*

Jewel Cave National Monument

Stratum	Species
Tree canopy	*Pinus ponderosa*
Subcanopy	*Pinus ponderosa*
Short shrub	*Arctostaphylos uva-ursi*

DIAGNOSTIC SPECIES
Globally
Pinus ponderosa, Arctostaphylos uva-ursi, Shepherdia canadensis

Jewel Cave National Monument
Pinus ponderosa, Arctostaphylos uva-ursi

VEGETATION DESCRIPTION
Globally
Pinus ponderosa is the dominant tree in this woodland community. *P. ponderosa* reproduces successfully in this community and is found as seedlings and saplings as well as mature trees. There may be seedlings of *Populus tremuloides* and *Quercus macrocarpa.* In northern New Mexico and southern Colorado, *Pseudotsuga menziesii* may also be present, but elsewhere rarely do any species except *Pinus ponderosa* grow larger than saplings. Shrubs are prominent in this community. Hoffman and Alexander (1987) found that in 10 stands in the Black Hills, shrubs averaged 43.9% cover while the herbaceous stratum averaged 19.3% cover. The most abundant shrub was *Arctostaphylos uva-ursi*, which covered an average of 33% (range of 10-85%) of the surface. Other shrubs that are likely to be present are *Spiraea betulifolia, Juniperus communis*, and *Symphoricarpos albus*. Typical herbaceous species are *Achillea millefolium, Fragaria virginiana, Lathyrus ochroleucus,* and *Oryzopsis asperifolia.*

Jewel Cave National Monument
This community is dominated by *Pinus ponderosa in* both the canopy and subcanopy. Coverage in each stratum typically is less than 25% and often less than 10%. Subcanopy coverage is often greater than canopy coverage. Short shrub coverage typically is between 10 and 50%. *Arctostaphylos uva-ursi* occurs consistently with other species often present, including *Shepherdia canadensis, Juniperus communis, Physocarpus monogynous*, and *Symphoricarpos* sp. Herbaceous cover usually is sparse (less than 10%) and variable in species composition.

OTHER NOTEWORTHY SPECIES Information not available.

CONSERVATION RANK G4

RANK JUSTIFICATION

DATABASE CODE CEGL000844

COMMENTS
Globally
Fire was likely an important factor in the regulation of stand structure historically.

The stands used to document the *Pinus ponderosa / Arctostaphylos uva-ursi* Habitat Type described by Hoffman and Alexander (1987) had very high basal area and densities for a woodland, possibly due to their sampling procedure. The dense structure may have affected the floristic makeup of the stands and made the list of dominant species a poor reflection of the community as a whole.

Jewel Cave National Monument
This type often occurs in mosaics with other pine types. At several plot and observation point locations, *Arctostaphylos uva-ursi* and *Symphoricarpos albus* were equally common, and it was difficult to assign community names to the stands.

REFERENCES
Alexander, R. R. 1988. Forest vegetation on national forests in the Rocky Mountain and Intermountain region: habitat types and community types. General Technical Report RM-162. USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO. 47 p.

Hoffman, G. R. and R. R. Alexander. 1987. Forest vegetation of the Black Hills National Forest of South Dakota and Wyoming: A habitat type classification. Research Paper RM-276. USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO. 48 p.

Jones, G. 1992. Wyoming plant community classification. Unpublished draft. Wyoming Natural Diversity Database, The Nature Conservancy, Laramie, WY.

McAdams, A. G., D. A. Stutzman, and D. Faber-Langendoen. 1998. Black Hills Community Inventory, unpublished data. The Nature Conservancy, Midwest Regional Office, Minneapolis, MN.